

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
10 February 2005 (10.02.2005)

PCT

(10) International Publication Number
WO 2005/012508 A1

- (51) International Patent Classification⁷: C12N 5/06, 5/08 (74) Agent: FISHER ADAMS KELLY; Level 13 AMP Place, 10 Eagle Street, Brisbane, Queensland 4000 (AU).
- (21) International Application Number: PCT/AU2004/001006 (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: 28 July 2004 (28.07.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 2003903896 28 July 2003 (28.07.2003) AU (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- (71) Applicant (for all designated States except US): QUEENSLAND UNIVERSITY OF TECHNOLOGY [AU/AU]; Gardens Point Campus, 2 George Street, Brisbane, Queensland 4000 (AU).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): UPTON, Zee [AU/AU]; 53 Isles Rd, Indooroopilly, Queensland 4068 (AU). HARKIN, Damien [AU/AU]; 73 Flinders Crescent, Forest Lake, Queensland 4078 (AU). LEAVESLEY, David [AU/AU]; 53 Isles Road, Indooroopilly, Queensland 4068 (AU).
- Published:**
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: SKIN REGENERATION SYSTEM

(57) Abstract: A cell culture medium and system are provided which eliminate or at least reduce the requirement for exogenous components such as serum and feeder cells. The cell culture medium comprises an IGF and vitronectin or fibronectin and, optionally an IGFBP, and is particularly suitable for propagating keratinocytes for subsequent use in skin growth and regeneration. This invention also relates to compositions and methods for skin growth and regeneration *in situ*, which utilize aerosol delivery of cultured keratinocytes.



WO 2005/012508 A1